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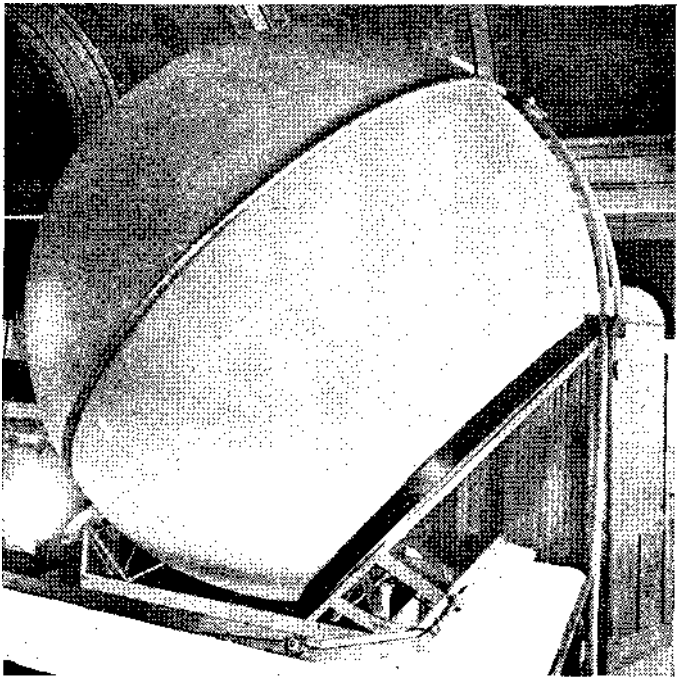
The Atwood Celestial Sphere



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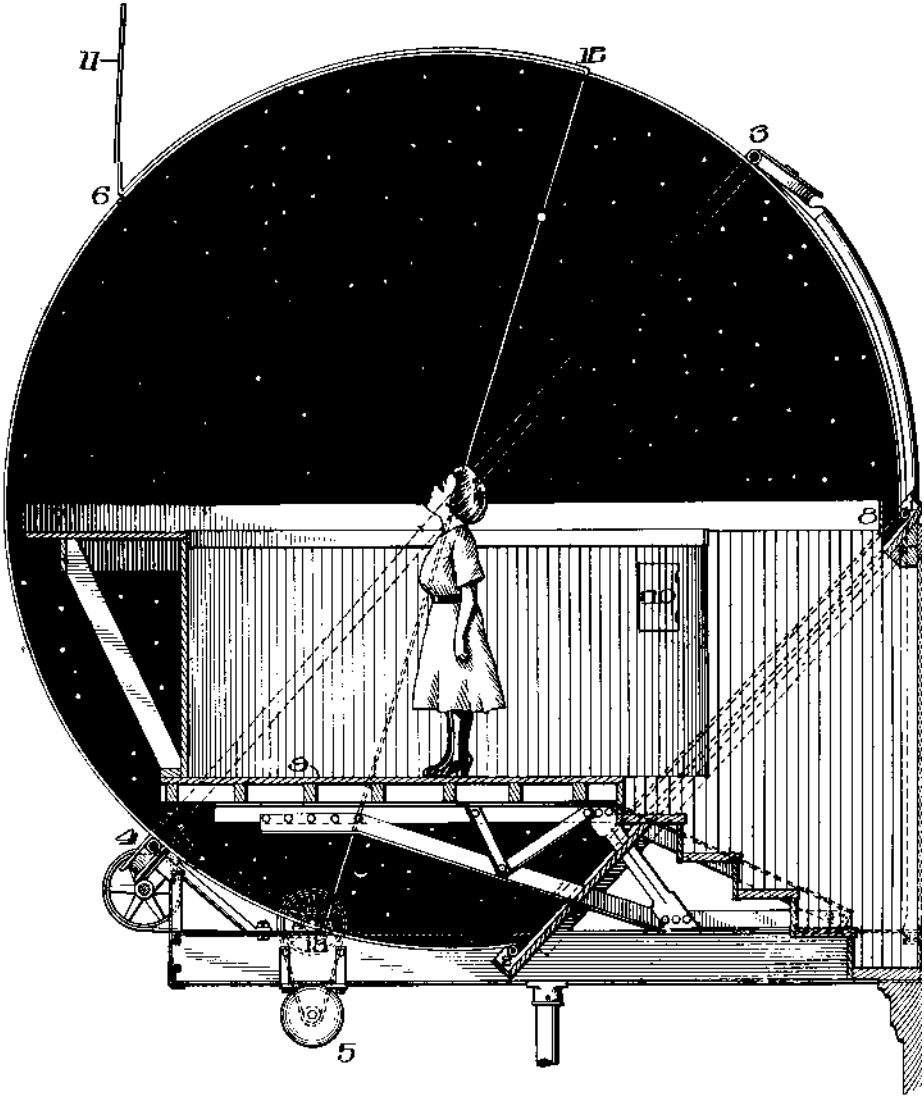
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THE ATWOOD CELESTIAL SPHERE

As one looks out at night upon a clear sky the impression gained is of an hemispherical dome of almost infinite size, studded with stars. The Celestial Sphere gives a miniature reproduction of the surface which we call the sky, and in which the stars are commonly imagined to be placed.

As the earth turns upon its axis, the sun, moon, and stars appear above the horizon in the East, pass overhead and sink from view in the West, and it seems as if the sky were moving instead of the earth. So in this apparatus, the sphere is mounted to rotate about the miniature Earth, and the stars appear at the East and pass overhead, following precisely similar paths to those followed by the real stars in the real sky.

The stars of the first, second, third, fourth, and a selected number of those of the fifth magnitude, visible from the latitude of Chicago are represented in the sphere, and the total number is 692. The celestial equator is clearly marked in the interior of the sphere, and the eliptic, or apparent yearly path of the Sun among the stars is also shown.

The Sphere is made of very thin galvanized sheet iron $_{614}$ of an inch thick. The stars are represented by tiny perforations in the sphere. Different sized perforations have been made to represent stars of different magnitudes. The size and location of each star in the sphere has been determined with great care by using an instrument especially constructed for this purpose, so that the sphere is an accurate miniature representation of the heavens.

In this sphere one can study the heavens without thought for clouds, rain or even time. One can enjoy the unique sensation of turning the sky about at will, or causing the stars to stand still in their tracks.

The sphere is of interest to everyone, and is of especial value to organized groups for study. It has proved very helpful in the educational work of the Academy, and is frequently visited by classes of all ages from kindergarten to college. It will be demonstrated at any time provided appointment is made in advance.